

Research Paper

Designing the garden of Geddes: The master gardener and the profession of landscape architecture

Jan Woudstra

Department of Landscape, The University of Sheffield, Arts Tower, Western Bank, Sheffield S10 2TN, UK

ARTICLE INFO

Keywords:

Landscape architecture
History
Interdisciplinarity
Cultural and ecological approaches

ABSTRACT

The influence of Patrick Geddes (1854–1932) on the landscape architecture profession has been widely acknowledged, but there is no critical review of the nature of this influence on theory and practice. Geddes appears to have been the first person in Britain to adopt the term landscape architect to denote a profession in the American sense as someone who dealt with city planning, civic design and parks systems. This profession seemed to encompass his wide ranging interests, providing a suitable vehicle for his transdisciplinary approaches, but which he later transferred to that of town and regional planning. His approach to understanding landscapes was to study towns and regions from a cultural, ecological and economic perspective in a systematic way of survey, analysis and design. Geddes's methods were gradually adopted by the landscape architecture profession, and purely Beaux Arts-architectural approaches phased out. By tracing contemporary references, this paper highlights key individuals who helped to promote his ideas in the landscape architecture profession then and now, and shows how his enduring influence and longstanding impact have to do with the systematic approach and methods he set forth. Today similar approaches are being promoted by other professions, but with a different perspective, and suggests that rather than various disciplines setting up silos, trying to defend their territories, with climate change and food security looming it is timely to promote more integrated approaches. This is well in line with Geddes's ideas who not only encouraged interdisciplinarity, but also warned against inadvertent specialisation.

A century after the publication of Patrick Geddes's *Cities in Evolution* (1915) changed the study of cities from a purely engineering, architectural and administrative one to one with an emphasis on social aspects, there have been significant changes to the way they have been conceived and designed. By emphasising sociological, ethical, factors he ensured rich and varied approaches that have affected various disciplines. Some of these disciplines were actually conceived by Geddes, while others have been and are being generated based on his ideas or principles in ways that he himself could not have foreseen. One of the professions that he initiated in Great Britain was that of landscape architecture c.1904. Yet it was not until 1930 before the profession was actually established with its own professional body. By this stage many of the intended tasks had been taken on by town planners, another new profession whose Town Planning Institute had been founded in 1914.

Despite the fact that he did not partake in the actual creation of the profession he has been lauded as 'the most important landscape and planning theorist of the twentieth century', and as the 'founder of landscape planning in Britain'. While his contribution to various professions has been analysed, there is currently not one that specifically

looks at his relationship with landscape architecture. Thus this paper sets out to:

- More concisely consolidate and briefly describe Geddes's development and interdisciplinary approach to the field of landscape architecture.
- Clearly state his contributions to the field, both in theory and practice.
- Identify the influence of such work on the field, and
- Illustrate its current relevance.

There is presently no review that attempts to put his contribution to landscape architecture in a contemporary context and explores the tension between a more limited and more expansive, synoptic, vision of the discipline. This paper is an attempt to position Geddes as one of the fathers of landscape architecture who by pioneering new avenues helped to articulate the nature of the profession and then continued to question its premise. It is primarily a literature study, backed up by interviews with those that have more recently continued to quote Geddes's relevance to the landscape profession.

E-mail address: j.woudstra@sheffield.ac.uk.

<https://doi.org/10.1016/j.landurbplan.2018.05.023>

Received 30 January 2017; Received in revised form 3 May 2018; Accepted 28 May 2018
Available online 22 June 2018

0169-2046/ © 2018 Elsevier B.V. All rights reserved.

1. The garden of Geddes

Shortly after the publication of Geddes's *Cities in Evolution* (1915) one of his first biographies appeared; it was entitled 'The Garden of Geddes' in which its author, Huntly Carter, made the apt analogy of Geddes (1854–1932) as a gardener, and which was in fact one that he himself had been promoting. Carter, an otherwise theatre critic, took it a step further and described him as 'the master-gardener of modern social aspiration- the aspiration towards a civic renaissance', with Geddes 'to play a leading part in the re-making of the globe as the Paradise of an inspired gardener' (Fig. 1). He was 'to annex the universe and remould it in his likeness; to test it in the crucible of his mind and to distil therefrom a solution of its mysteries'. World War I was 'auspicious for the beginning of a new world, founded upon the transplendent traditions of the old', and he implied this provided new opportunities, continuing:

The master-gardener of these two hemispheres gathers up and focuses in one comprehensive study the influences of the past and present which are the forces of to-morrow. He is a union of its oldest and newest. He unites ancient seeing and modern doing, prophetic vision and practical inspiration, Greek theory and Georgian experiment. He expresses the secret aspiration of the human will to enter into more fruitful relations with the universe. He is the interpreter of a renewed desire for a world that shall be a place of oracle and interpretation in one. To him the right function of the world is the manifestation of beauty and life. (Carter, 1915 p. 455).

Carter continues to trace the seven stages of the master gardener's life thus far, and does this in a way that reveals full comprehension of Geddes's philosophy: 'The roots of every man's life are the early formative influences of place, people and work. Place, parents and occupation; these are his chief good or bad.' This is a clear reference to the notion of 'place, work and folk', which Geddes had translated from *lieu, travail* and *famille* of the pioneering French sociologist Frédéric le Play (1806–1882), whose theories he had first encountered while visiting the 1878 World Fair in Paris and that were to have a fundamental influence on his approach. This triad, which he also adapted as

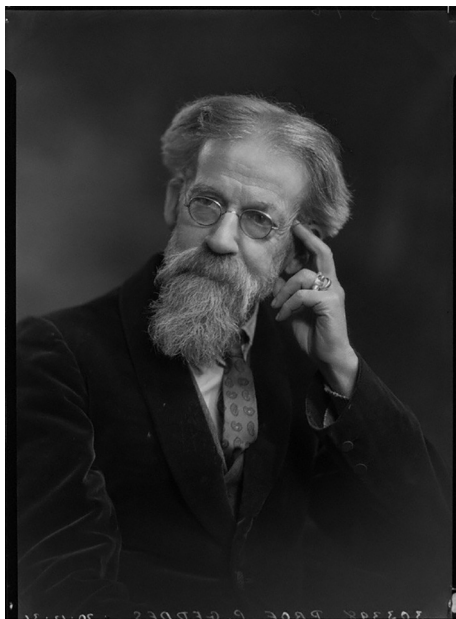


Fig. 1. Patrick Geddes (1854–1932) was described as 'the master-gardener of modern social aspiration- the aspiration towards a civic renaissance' https://commons.wikimedia.org/wiki/File:3APatrick_Geddes.jpg (Lafayette (Lafayette Ltd), half-plate nitrate negative, 30 December 1931).

'environment, function and organism' became the foundation of much of his later work (Meller & Geddes, 1990, pp. 34–47). Carter inferred 'that the most appropriate place for a creative gardener to be born in is Eden', noting that in a metaphorical sense Geddes's earliest home near Perth with 'a garden opening on one side to the tender beauty of a lowland valley and on the other looking out upon the rugged grandeur of highland ranges' was an Eden. Here he had learned gardening and botany from his father, while the landscape had imparted a feast of nature impressions that together with the discipline of gardening, would have forecasted phases of his development.

Eventually Geddes would arrive 'at a conception of the Universe as one vast garden wherein he would see Life symbolized as a tree with its roots in the past, its branches and members in the present and its blossoming in the future'. This '*arbor vitae* would be emblematic of man's seeing and doing in the past, present and possible' and set the seed from a life-centred universe to a life-centred philosophy. Thus during the first of his seven stages he escaped

from the artificial to the natural order, to discover a renewed contact with nature, forming a conception of a universal garden in the midst of which shall be a tower whence man may watch the unfolding of the immense drama of life. In the second decade we watch him turn from organic to spiritual gardening, from the study of origins and sources to inquiry and experiment in the possibilities of culture.

Before his father allowed him to study at a university Geddes worked at a bank for over a year and then went to London to study with the biologist Thomas Huxley. While not completing a set course it introduced him to the main theories and helped to broaden his outlook, being particularly influenced by Charles Darwin's, Huxley's and Herbert Spencer's views of nature, Auguste Comte's notion of civics and Le Play's social geography of region and occupation. Thus his studies had led him 'into the heart of his Garden-universe' and during which 'he had maintained his position as a gardener' (Carter, 1915, pp. 457–463). After a spell of temporary blindness in Mexico he had discovered Gottfried Wilhelm Leibnitz's philosophy that attempted to reconcile life and religion and devise a mechanical logic without which Western Europe 'would get buried beneath specialisms'. Thus Carter traced the three stages of the 'creative gardener' through 'his seed-time in Eden, his ascent on the wings of empiricism and his temporary suspension above earth while he considered all things in their proper proportions and relations'.

The fourth and most important stage however was 'the realization of his great ideals', at which, '[w]ith renewed strength and sight then he emerged from the Cloister of Contemplation and returned to practical "gardening" armed with new and effective instruments of sociology for ordered and far-reaching study in many and varied directions...' He had first accepted a demonstrator position at University College London, moving to Edinburgh a few years later and to the University of Dundee as professor of botany in 1888. This position required him to teach during the summer months, leaving time for his wide range of other ventures during the remainder eight months. During this time he developed the notion of civics, or as he put he was busy "hawking Civics in a barrow round the world", during which his 'ever-pressing questions' were raised: "How can we create a *Real Human Life*? How can we create the Garden where such life may be lived?" Carter concluded his essay with the prediction that Geddes would be 'carrying his work to completion in all parts of the civilized world', and questioning 'Have we not followed the gardener in his quest for an answer in Science, Philosophy, Ethics, Religion, Art, Social Service, and above all in the labyrinthine ways of Life itself? And finally, have we not come up to the mountain of Light than which Fuji is not more beautifully crowned?' (Carter, 1915, p. 595).

Geddes appreciated this label as a gardener and had promoted the notion himself arguing that the 'difference between creating gardens as places for plant life and cities as places for human life is only a matter of

degree: “My ambition being...to write in reality- here with flower and tree, and elsewhere with house and city- it is all the same” (Welter, 2002, p. 18). This analogy of Geddes as a gardener thus seems to sum up his wide-ranging activities, without the restrictions that a title normally includes. He had pioneered in biology and ecology, science and philosophy, human evolution and geography, sociology and civics, arts and economics, making original contributions in various aspects and setting up organisations that furthered study and application. His impatient nature did not allow him to nurture and develop these ideas himself, setting the next question to explore his ever expanding realm and field of work.

Furthermore, in 1887 he and his wife Anna had moved into a slum in Edinburgh and with social consciousness pioneered slum clearance there when they by example and ‘tactful aid... persuaded other tenants to purify and tidy their quarters, using such inexpensive means as flower-boxes for dull windows and white or colour distemper washes for dingy walls.’ They aroused public opinion and forced public officials to remove ‘century-old accumulations of rubbish’, despite opposition from house owners and officials. The experience taught him about the politics and workings of the city environment and engaged him with new ideas and institutions required to tackle social and environmental ills (Boardman, 1944, p. 103). One of the organisations he became engaged with at this stage was the National Trust, probably through a friend of Anna’s, Octavia Hill, who had been involved in social reform in East London, and was also on the executive committee of the Trust. Geddes joined the committee in 1896, a year after it had been founded (*‘The National Trust’*, *The Times*, 26 November 1896, p. 8; *‘The National Trust’*, *The Times*, 10 July 1897, p. 15).

2. City development instead of park planning

When in 1903 Geddes was asked to produce a report for the laying out of Pittencreeff Park and Glen for the newly founded Carnegie Dunfermline Trust he and the garden designer Thomas Mawson (1861–1933) had been provided with the same commission and the two men considered being in competition with each other. As it was, Geddes seized the opportunity to explore and assimilate his theories in a practical application as an example of a regional survey, but in doing so overstepped the brief that required the adaptation of an existing laird’s park and glen and suggestions for proposals for ‘structures upon the edge of the Park’ (Geddes P., 1973 reprint of 1904 edition, p. 32) (Fig. 2). Besides chapters dedicated to park and glen and their features, he included chapters on ‘Neighbouring property and housing improvements’, ‘Social institutes and central institute’, ‘Stream purification and its results’, Parks and buildings in their bearing on city improvements’ and sections on ‘Nature museums’, ‘Labour museums’, ‘History and art’ and ‘Life and citizenship’. All this was illustrated with professional photographs, draughtsman’s drawings, and architectural designs, with a comprehensive text amounting to 232 pages. The narrative adopted provided the reader with a tour around Dunfermline that illustrates how planning might improve the fabric of the town. The text leaned heavily on the author’s past experience and incorporated survey information (historical, physical, geological, social, etc.) and proposals. It was well illustrated, including various before and after views (based on the methodology of Humphry Repton, but which ‘can now be carried out with far greater accuracy in these days of photography’ (Geddes P., 1904, p. 16n), and dwelled extensively on issues of principle, but provided scant real detail that would enable implementation (Fig. 3).

While the Trust was disappointed about the scope of the work that covered aspects outside their ownership and control and was therefore rejected, to Geddes this was a marker that publicized his principles in a practical application. It was a test case for over sixty plans for towns and cities that were to follow, mainly in India and Palestine. It also formed the basis for refining the collections of survey material on cities that he later displayed in Great Britain and abroad. This ‘Cities Exhibition’ was shown at the 1910 Town Planning Exhibition and

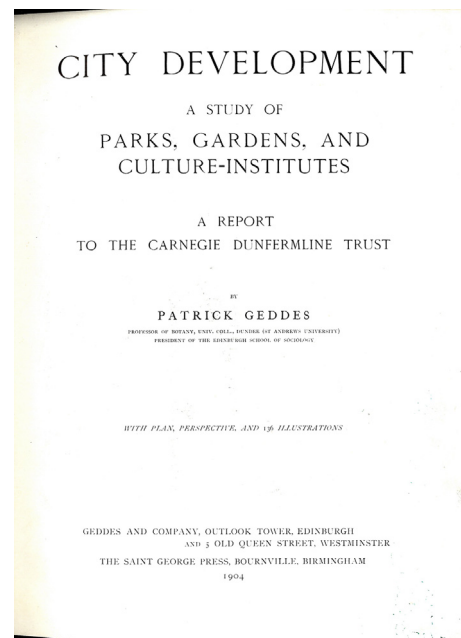


Fig. 2. Geddes presented his proposals for Pittengriff Park in a report entitled *City Development* (1904), which seized the opportunity to explore and assimilate his theories in a practical application (title page).

consisted of ‘a graphic presentment of the Development of Cities and of their historic and sociologic Interpretation, as well as be more fully and systematically representative of the best methods of Town Planning and of the possibilities of City Development’ (Geddes, 1911, p. 574).

Soon after the publication of *City Development* (1904) Geddes represented his undertaking on his letterhead as: ‘Patrick Geddes and Colleagues/Landscape Architects, Park and Garden Designers, Museum Planners, etc.’, which reveals that the scope of work as he then considered it was best captured by the new title, which he saw being used by the Olmsted firm, and others, during his visit to the USA in 1899–1900, and the work of which had a similar remit (Geddes, 1968, pp. 232–3). Geddes’s scope of work was defined as: ‘City Plans and Improvements/Parks and Gardens/Garden Villages/Type Museums/Educational Appliances/School Gardens’ (Boardman, 1978, p. 230). This was the first modern use of the title of landscape architect in Great Britain, well in advance of the founding of the professional body, the Institute of Landscape Architects in 1929/1930. It is noticeable that he seems to have discontinued the use of the name of this profession afterwards, perhaps because of the invention of the term town planning in 1906 (Wright, 1982, p. 21n) that caught the public imagination and by 1909 had led to the passing of the *Town Planning Act* and in the same year to the founding of the Department of Civic Design at the University of Liverpool. This was the first university course in the world for the study of town planning and related topics, and included a course in landscape architecture which was taught by Mawson.

The Town Planning Institute was founded the next year in 1910. This seemed to have encompassed and duplicated some of the scope of work defined as landscape architecture. Later Geddes adopted ‘town planning’ as a broader term, and became one of its main proponents, yet he maintained that ‘landscape making’ was the ‘master art’:

Plainly the hygienist of water supply is the true utilitarian; and hence, even before our present awakening of citizenship, he has been set in authority above all minor utilitarians, each necessarily of narrower task and of more local vision- engineering, mechanical and chemical, manufacturing and monetary- and has so far been co-ordinating all these into the public service. But with this preservation of mountains and moorlands comes also the need of their access: a

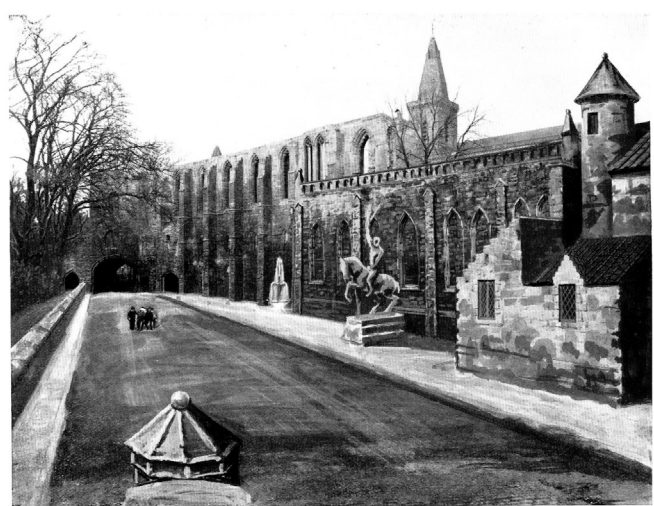
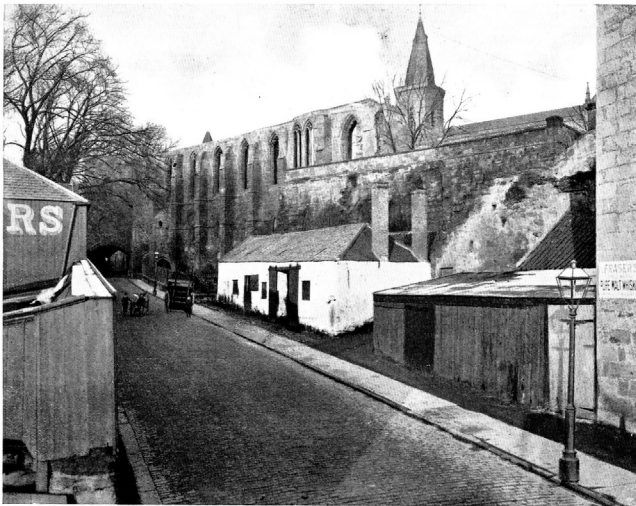


Fig. 3. A before and after view adapting Humphry Repton's methodology of presenting proposals for Pittencreeff Park (Patrick Geddes, *City Development: A report to the Carnegie Dunfermline Trust* (Birmingham: St George Press, 1904), pp. 138, 139).

need for health, bodily and mental together. For health without the joys of life- of which one prime one is assuredly this nature-access- is but dullness; and this we begin to know as a main way of preparation for insidious disease. With this, again, comes forestry: no mere tree-cropping, but silviculture, arboriculture too, and park-making at its greatest and best.

Such synoptic vision of Nature, such constructive conservation of its order and beauty towards the health of cities, and the simple yet vivid happiness of its holiday-makers (whom a wise citizenship will educate by admission, not exclusion) is more than engineering: it is a master-art: vaster than that of street planning, it is landscape making; and thus it meets and combines with city design (Geddes, 1968, pp. 95–96).

3. Cities in evolution

The publication of Geddes's *Cities in Evolution: An introduction to the town planning movement and to the study of civics* (1915) was not just an attempt to popularize these topics, but sought to 'express in various ways the essential harmony of all these interests and aims'. The book was an appeal that:

we must not too simply begin, as do too many, with the fundamentals as of communications, and thereafter give these such aesthetic qualities of perspective and rest, as may be, but above all things, seek to enter into the spirit of our city, its historic essence and continuous life. Our design will thus express, stimulate, and develop its highest possibility, and so deal all the more effectively with its material and fundamental needs (Geddes, 1968, pp. xxv–xxvi).

He stressed the need for a comprehensive survey of the city 'at its highest past, in present, and above all, since planning is the problem, foresee its opening future', thus considering the knowledge of the origins of the city and its life processes as an essential basis for any proposals.

Cities ought to be studied not solely, but also their interconnections in city regions, for which he introduced the word 'conurbation' (Geddes, 1968, p. 34), requiring new forms of governance that considered agglomerations of cities in connection with their industry. This notion of city regions is explored in Great Britain and contrasted with that of others, thus translating the issue globally. He explored social, historical, economical, and health issues and contrasted these at the

present with the past. The modern working man being 'aristo-democratised into productive citizen... will set his mind towards house building and town planning, even towards city design; and all these on a scale to rival –nay, surpass– the past glories of history' (Geddes, 1968, p. 71). This should create more than a "Utopia", no place or nowhere, and instead create a 'Eutopia', good place, 'of effective health and well-being, even of glorious and in its way unprecedented beauty, renewing and rivalling the best achievements of the past, and all this beginning here there and everywhere...' (Geddes, 1968, p. 73)

At one point he summarized that:

It is the development of a local life, a regional character, a civic spirit, a unique individuality, capable of course of growth and expansion, of improvement and development in many ways, of profiting too by the example and criticism of others, yet always in its own way and upon its own foundations. Thus the renewed art of Town Planning has to develop into an art yet higher, that of City Design- a veritable orchestration of all the arts, and correspondingly needing, even for its preliminary surveys, all the social sciences (Geddes, 1968, p. 205).

4. Defining landscape architecture

As Geddes moved on, the profession of landscape architecture was adopted and re-defined by Mawson, who used it in the same way as he would have 'landscape gardener' some years earlier (Mawson, 1901, p. 1), noting that during the mid-Victorian period the profession had lost status as 'a means of serious art expression, and had fallen in the hands of 'ill-informed amateurs obsessed with those crude conceptions of the "picturesque" which at that period produced such disastrous results'. These included 'wriggling paths, impossible contours, white spar rockeries, and a distressing confusion of little aims' and meant that landscape architecture 'had outrun its claim to serious consideration' (Mawson, 1927, p. xiv). The phrase landscape garden was first used by the poet William Shenstone in his posthumously published 'Unconnected thoughts on gardening' (Shenstone, 1764), and it had later been popularised through the writings of Humphry Repton (Repton, 1794; Repton, 1803). The concepts of landscape and garden architecture were popularly used by John Loudon, to refer primarily to build structures in their respective contexts (Loudon, 1840). In the English language landscape architecture was popularly used by the American Frederick Law Olmsted to indicate the profession, in order to highlight the various new responsibilities beyond the garden. While Mawson did

not define landscape architecture, it is clear from the way in which he split talks on his work between lectures on landscape architecture and those on civic art, that his view of landscape architecture was more limited than that of Geddes's.

Mawson saw landscape architecture as primarily concerned with aspects of garden making; civic art included city planning, the civic survey, street planning, park systems, outdoor furniture and housing (Mawson, 1927, pp. 161–161). Yet at his address to the Institute of Landscape Architects, for which Mawson had become founding president in 1929, it is clear that he included both landscape architecture and civic design within the field of work of the landscape architect (Anon., *The Manchester Guardian* 12 February 1930, p. 4), and the artificial division may well have been caused by the fact that these reflected the contents of Mawson's two main publications: *The Art and Craft of Garden Making* (1900, etc.) and *Civic Art: Studies in town planning, parks, boulevards and open spaces* (1911). Unfortunately this may inadvertently have influenced the limited scope within the official OED definition of landscape architecture as 'the planning of parks or gardens to form an attractive landscape, often in association with the design of buildings, roads, etc.' (*Oxford English Dictionary* online, 'landscape architecture').

The lack of the socio-cultural dimension of landscape architecture and that of interdisciplinarity are the main differences between this definition and the views of Geddes. This shows the difficulties in defining and establishing the realm of a new profession within existing ones, the processes of specialisation that define it and the scope that was initially envisioned. While Mawson's title *Civic Art* suggested the influence of Geddes in his avocation of civics and importance of town planning – though not acknowledged, it was presented from the point of view of the all-knowing designer, rather than a bottom up approach, and it is revealing of Mawson's conservative position.

When Geddes died in 1932, the landscape architecture profession in Britain was only a few years old, and he had not had any involvement with the Institute. Yet his influence was clear and Thomas Adams, an early member, but also a town planner who was involved in large-scale Geddesian regional surveys, particularly in North America, was keen to see 'landscape design' as 'a branch of town planning'. In 1934 he re-defined landscape architecture as being: 'the art of creating and preserving beauty in the surroundings of human habitations and in the broader natural scenery of the country' and referred to three different aspects: 'that of the individual garden in relation to an individual dwelling, that of groups of gardens and the streets connecting them in town and suburb and that of the whole neighbourhood including all open areas, parks, playgrounds, roads, etc.' (Colvin, 1934, p. 45). It is clear that Adams considered landscape architecture primarily for aesthetic rather than functional or structural purposes. He thought of it as needing to service town planning. This may also reflect Geddes's thinking in that the perception of landscape architecture as the truly interdisciplinary profession that would solve various ills had now migrated to this new profession.

It was the young landscape architect Christopher Tunnard (1910–1979), who in 1938 searched for the creative forces that might be stimulating and give rise to creativity in landscape design, suggesting three approaches; functional, empathic and artistic, which he had extracted from modernist approaches rather than those suggested by Geddes (Tunnard, 1938, pp. 160–7). By this stage Geddes's *City Development* and *Cities in Evolution* had long been out of print and could only be found in libraries, where the latter was discovered by Jaqueline Tyrwhitt (1905–1983). She had initially set out on a career as a gardener, with a spell at the Architectural Association in order to learn to draw, then working for Ellen Willmott in her garden at Warley Place, followed by international travel and a position at Dartington Hall. Here she read *Cities in Evolution*, which developed her interest in town planning and encouraged her to study the subject in Berlin in 1937. On her return she enrolled at the School of Planning and Research for National Development (SPRND), which had been set up within the

school by E.A.A. Rowse, the principal of the Architectural Association, who ran the two schools in conjunction with each other. The curriculum of the SPRND was inspired by the philosophy of Geddes, with the Advisory Board including his admirers George Pepler and Raymond Unwin (Shoshkes, 2013, p. 32).

Tyrwhitt, who had also joined the Institute of Landscape Architects before the War, became director of the Association of Planning and Regional Development in 1941 and one of her responsibilities was a correspondence course on town planning. Besides this she ran a completion course for the School of Planning as well as a postgraduate evening course on landscape design (Shoshkes, 2013, pp. 89–91; Shoshkes, 2017, pp. 15–24). From 1944 landscape architects Brenda Colvin and Brian Hackett taught the latter. By 1943 Colvin and Tyrwhitt had been involved in a book project that selected trees for post war reconstruction, including on roadsides, in towns, along streets and on village greens. It was not till 1947 that *Trees for Town and Country* was published (Colvin & Tyrwhitt, 1947, p. 5–7), by which stage Colvin and Hackett had their own book projects that reveal the inheritance of Geddes. Colvin did not quote the latter herself, but commenced the first chapter entitled 'Nature and man' of *Land and Landscape* (1947) with a quote from J.W. Bews's *Human Ecology* (1935) who related his methods to that on 'the "regional surveys" of Le Play and Geddes and their respective schools' (Bews, 1936, pp. 560–561). She also quoted the great Geddes disciple Lewis Mumford from *The Culture of Cities*, first published in 1938 (Colvin, 1947, pp. 1, 4) (Fig. 4).

Like Colvin, the influence of Geddes's approach is not only visible from the title of the book, in Hackett's case *Man, Society and Environment* (1950), which looked at landscape architecture from a much wider perspective than the traditional pre-war view when most of the work was in the design of parks and gardens. It is also clear from the contents. He believed that:

We cannot say that Geddes established a new theory of planning, but his wisdom touched upon so many aspects that he certainly revolutionized planning thought and prepared the way for the

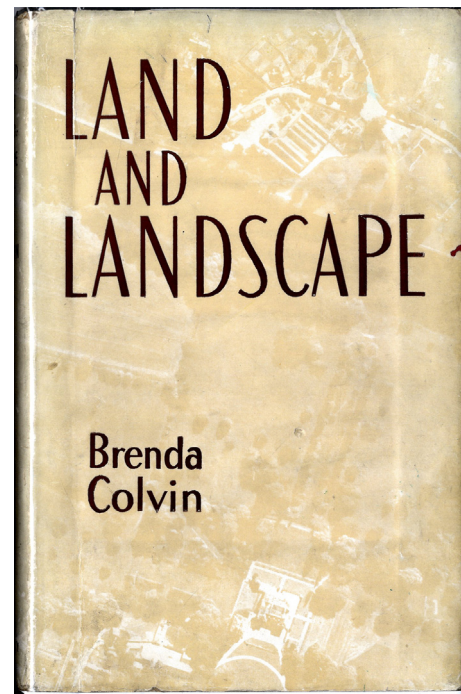


Fig. 4. Brenda Colvin's *Land and Landscape* (London: John Murray, 1947) which explored the problems of development in town and country and how that was influenced by planning. In its approach the book was indebted to Geddes's methodology (cover).

theory that is now crystallizing. Geddes was the prophet of the art of living for this Age of global understanding and misunderstanding, and of mechanization. He was one of the first to see that a relationship existed between Society and its Environment throughout history, that geography meant a great deal more than an understanding of place names and the earth's surface, and that the pure and natural sciences were inter-related with the pattern of human life. In physical planning, Geddes recognized that town structure was always changing; this led him to plead that the past and present need review, analysis, synthesis, and projection before the framework of the future can be delineated a little more clearly: the doctrines that planning is a continuous and not a static process, and that Survey must come before Plan. Geddes was also a pioneer in regionalism in that he recognized the dependency of communities and their environment upon national and regional trends and characteristics. This new way of approaching planning problems was inspired by Le Play, from whom Geddes took his objective method of studying Society: Folk, Work, Place.

Hackett noted an earlier precedent of the Survey in *Life and Labour in London* by Charles Booth, commenced in 1889.

He then showed how Mumford later 'clarified and developed' the Geddesian approach and took his teaching a stage further. This was done by drawing attention to the relationship between physical, social and economic factors in the past and in the present. Mumford proposed that 'despite mechanization and technological progress, Man is limited to the 'human' scale in his way of living' and this 'has influenced a breaking-down of the vast metropolis into social units based on school patterns and neighbourhoods' (Hackett, 1950, pp. 230–231) (Fig. 5). Hackett does not define landscape architecture, despite the fact that he had just been appointed to a lectureship in the subject at King's College, University of Durham. However Colvin revealed the wider remit of the profession as being 'concerned with the design of human environment' (Colvin, 1947, p. 64).

Hackett's observations on Mumford, were of course not the first from

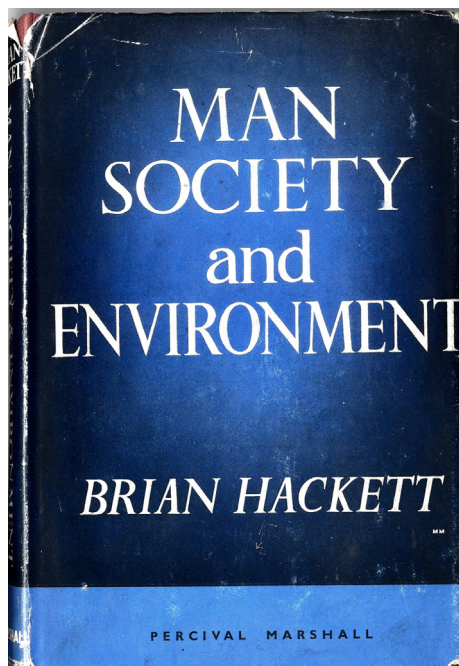


Fig. 5. Geddes's influence is not only visible from the title of Brian Hackett's *Man, Society and Environment* (London: Percival Marshall, 1950), which looked at landscape architecture from a much wider perspective than the traditional pre-war view when most of the work was in the design of parks and gardens. It is also clear from the contents (cover).

a landscape and garden perspective, and The Studio editor F.A. Mercer in his annual *Gardens and Gardening* dedicated the 1939 issue to the progress of garden design. He noted that gardens may be designed 'to read or write quietly, to meditate or to grow something', relating this to 'modern houses' and the concept of "Megalopolis" that he acknowledged as originating from Mumford, but which in fact had been popularised by Geddes. The 'great city and all its works has led to settings so informal as hardly to be called gardens at all - stretches of meadow approaching close to the house'. He related this to the modernist city and noted that 'this trend in general would seem to be freer and less formal planting than heretofore, a more sensitive regard for colour and texture, and for the natural suggestions provided by the site itself'.

It was inevitable that 'the landscape architect sees the garden in larger terms than the private owner's comparatively small space, as the face of the country in fact, just as the architect thinks in terms of communal planning as well as in private houses'. While it was not the intention of the book to discuss this, in their contribution Thomas Adams (then president of the ILA) and Peter Youngman clearly had this in mind for the garden of the future which 'will need to be more free and flowing in its pattern, with less emphasis on its plan and more on the texture, forms and time elements of its plant groupings and on the relationship of these to the architecture of the house'. It is clear that this provided a vision for the megalopolis, where landscape architects were 'needed to replace the architect in garden design and supplement the gardener' (Mercer, 1939, pp. 7, 14–15). This narrow vision of the function of the landscape architect clearly contrast with the much more liberal post-war one of Colvin's with its social implications.

5. Providing a Geddesian canon

When Patrick Abercrombie (1879–1957) succeeded Stanley Adshead (1868–1946) as professor in the Department of Civic Design at the University of Liverpool, he became the main promoter of the Geddesian town and regional surveys and plans. These included surveys of large areas in East Kent and the Bath and Bristol Region, but he gained reputation for his Sheffield Survey of 1924 (produced with Robert Mattocks, Mawson's nephew, a town planner and expert in park design), which became a model for British planners (Wright, 1982, pp. 123–157). Abercrombie became famous for his County of London and Greater London plans, produced in 1943 and '44 respectively, which provided an international standard (Forshaw & Abercrombie, 1943; Abercrombie, 1945). These were produced with a team of assistants, including architect and landscape architect Peter Shephard (1913–2002), who in the *Greater London Plan* produced drawings for projects for a park and a new town. This not only shows the lasting influence of Geddes but also the close relationship between the various disciplines, confirmed by the fact that Abercrombie was also an active member of the ILA.

The post war reconstruction once again created a viable climate for the ideas of Geddes. An important untapped resource for his ideas were the reports he wrote for some eighteen Indian cities between 1915 and 1919. These were collated by Henry Vaughan Lanchester (1863–1953), an architect and town planner with a great interest in landscape architecture (Lanchester, 1908, pp. 343–348; see: Woudstra, 2015, pp. 119–138). He had been invited to advise in India and asked Geddes to join him when he 'realised the value of his contribution to a broad humanistic outlook on the social aspects of civic improvement and the importance of this aspect in dealing with India'. Jaqueline Tyrwhitt edited the material under the auspices of the Association for Planning and Reconstruction and selected pertinent passages that could be seen as a canon that in current terms might be construed for either town planning or landscape architecture: 'The Geddes Outlook' set his general approach to town planning, which 'is not mere place-planning, nor even work-planning. If it is to be successful it must be folk-planning.' (Tyrwhitt, 1947, p. 22). 'The Diagnostic Survey' promoted an alternative

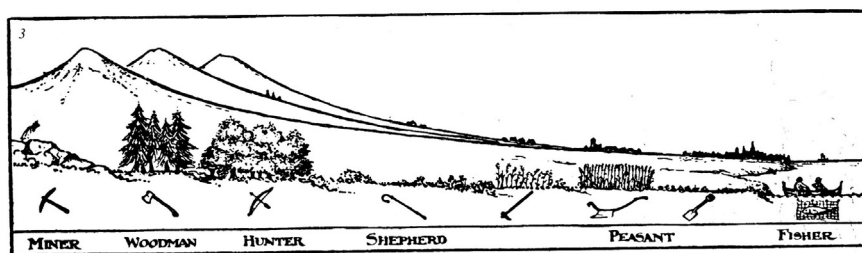
school of planning, of building and of gardening that investigates and considers the whole set of existing conditions; that studies the whole place as it stands, seeking out how it has grown to be what it is, and recognizing alike its advantages, its difficulties and its defects. This school strives to adapt itself to meet the wants and needs, the ideas and ideals of the place and persons concerned. It seeks to do as little as possible, while planning to increase the well-being of the people at all levels, from the humblest to the highest. City improvements of this kind are both less expensive to the undertaking and productive of more enjoyment to all concerned (Tyrwhitt, 1947, p. 25).

An alternative to driving new streets through an existing neighbourhood was ‘Conservative Surgery’ by first showing ‘that the new streets prove not to be really required since, by simply enlarging the existing lanes, ample communications already exist’ and secondly that ‘with the addition of some vacant lots and the removal of a few of the most dilapidated and insanitary houses, these lanes can be greatly improved and every house brought within reach of fresh air as well as of material sanitation...’ (Tyrwhitt, 1947, p. 25) ‘A Sociological Approach’ promoted ‘active co-operation... between the citizen and their town council’ (Tyrwhitt, 1947, p. 25). ‘Planning for Health’ was concerned with sanitation and public health and particularly sustainable water supplies striving for retention of tanks and reservoirs in Indian villages as they also contributed to a noticeable cooling effect (Tyrwhitt, 1947, pp. 66–83). ‘Open Spaces and Trees’ identified the importance of the village square for social life and health, promoting a ‘chain or network of such open spaces’, gardens, and the necessity of fuel and shade trees (Tyrwhitt, 1947, pp. 84–95).

The Tyrwhitt publication made this material more widely available for the first time, and was followed by a new edition of *Cities in Evolution* (1949) also edited by her. In it she cut sections, but added further material. ‘The Valley Section’ was covered both in the introduction and as part of the ‘Cities Exhibition’ text that was included as an appendix. It was incorporated to elucidate reference to this in the text as Geddes considered it as ‘the basis of survey’ and therefore the underlying principle in understanding his approach (Geddes, 1949). The Valley Section had initially been produced in 1909 in an attempt to envision the regional origins of the civilisation of cities. After this he had produced various versions, with Tyrwhitt re-publishing a fuller account in 1967 (Tyrwhitt, 1967, pp. 49–57; see also Shoshkes, 2017, pp. 15–24; Welter, 2017, pp. 25–26) (Figs. 6 and 7).

6. Reception by the landscape profession

Despite various publications by Geddes they do not appear to have been readily available and Youngman (who had also qualified as a town planner), for example, declared that he had not read any of Geddes’s books (Harvey, 1987, p. 105). Instead most of the latter’s principles were received through Mumford’s *Culture of Cities*, which he considered as a bible (Harvey, 1987, pp. 110–111). The architect and landscape



50

Fig. 6. Geddes considered The Valley Section it as ‘the basis of survey’ and therefore the underlying principle in understanding his approach (Jaqueline Tyrwhitt, ‘Patrick Geddes: The Valley Section’ in Dennis Sharp, *Planning and Architecture* (New York: George Wittenborn, 1967), pp. 49–57 (p. 50)).

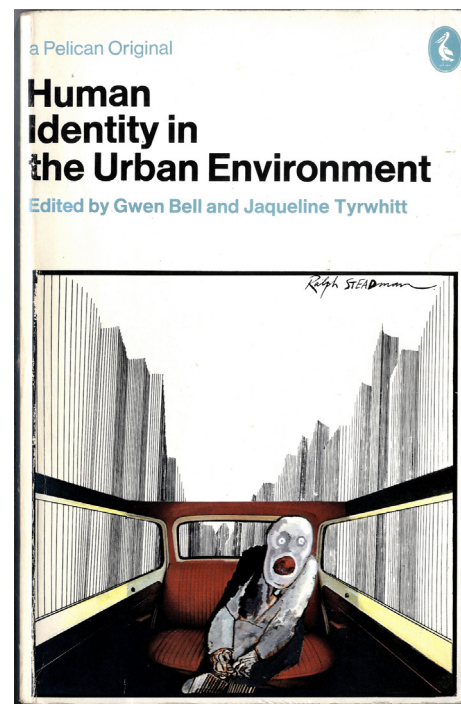


Fig. 7. Jaqueline Tyrwhitt remained a life-long champion of Geddes’s philosophy, here presented in the context of modernism Gwen Bell and Jaqueline Tyrwhitt (eds), *Human Identity in the Human Environment* (Harmondsworth: Penguin, 1972), cover.

architect Geoffrey Jellicoe (1900–1996), however, considered that *Cities in Evolution* ‘penetrated far into an ecology that comprehended the arts of civilized life as well as sciences’, noting that Geddes ‘maintained that his views were a development of the synoptic vision of Aristotle, that saw the city as a whole, and that this had expanded to become global.’ This he considered retention of tradition and thought that ‘the most important single factor in land design was the birth of the modern science of town- and country-planning.’ (Jellicoe & Jellicoe, 1975, p. 287).

While Geddes’s works may not have been generally available, it is clear that he changed people’s thinking by declaring city planning a social activity. Arthur Edwards a planner and urban designer who received his ideas ‘third hand’, provided a subjective interpretation of his influences, drawing once more the analogy of the city planner as a gardener:

He demonstrated that cities behave like living organisms and that the planner’s task is more akin to that of a gardener than that of a surveyor, a social reformer or an architect. Just as a gardener tends his plot for a few years of its history, so a planner controls his city

for a brief moment during the many centuries of its existence. Just as a gardener improves his trees by studying their shape, their habit of growth and the soil which suits them, and by pruning a branch here or feeding the roots there, so a planner should improve his city by studying its present forms, its evolution and its geographical background, and by clearing slums in one place and encouraging growth elsewhere.

Geddes taught that man could only create a humane environment by developing the intrinsic characteristics of a place and by studying the habits and needs of the people who were to live there. Like all great ideas it was a concept at once simple and profound (Edwards, 1981, pp. 90–91).

Despite the fact that Geddes wrote little specifically dedicated to landscape architecture University of Greenwich landscape educator Tom Turner referred to him as ‘the most important landscape and planning theorist of the twentieth century’, and the ‘founder of landscape planning in Britain’ (Turner 1987, pp. 1, 7). As a result he featured as a red thread through Turner’s *Landscape Planning* (1987). Remarkably a 1971 book with the same title by Hackett did not once list him that suggests a changing perception of the nature of landscape planning, which he saw as something new and modern and to whom any engagement with history would have been seen as subversive. Remarkably it is the modernist Arthur Korn who lists Geddes as one of the ‘moderns’ together with Mumford and Abercrombie, despite them having an alternative, place specific, approach (Korn, 1953, p. 83). Turner quoted primarily from various of Geddes’s Indian reports, presumably through the lens of Tyrwhitt. He had had a long interest in Geddes that was awakened on his first day of study in landscape architecture at Edinburgh when the whole class was taken to the Outlook Tower.

The book commenced with a quote of Mumford’s, and after defining landscape progressed with Geddes’s concept of ‘good place’, eutopia, as opposed to utopia, meaning no place, or no where. It then acknowledged Geddes as one of those who helped to move the focus of the landscape profession to the public domain, his commentary on drainage systems for cities (Turner, 1987, p. 109), environmental benefits of water tanks in India (Turner, 1987, p. 116), observations on children’s play (Turner, 1987, p. 161), his recommendations for survey, appraisal and analysis (Turner, 1987, p. 185); while finishing with a quote from *Geddes in India* on specialisation that continues to resonate today: “Each of the various specialists remains too closely concentrated upon his single specialism, too little awake to those of others. Each sees clearly and seizes firmly one petal of the six-lobed flower of life and tears it apart from the whole” (Turner, 1987, p. 189). Turner’s next book took the Geddesian approach a step further. *City as Landscape: A post-modern view of design and planning* credited Geddes with the use of ‘environmental layers’ as a basis for analysis and planning (Turner, 1995, p. 57), and the introduction of the survey-analysis-design method (Turner, 1995, pp. 39, 145).

The landscape architect and Edinburgh educator Catharine Ward Thompson explored Geddes through one project, the Edinburgh Zoological Garden, which she treated as the microcosm of his ideas. This zoo was a commission that Geddes had obtained in 1913 for his expertise in ‘landscape gardening’, and executed with Frank Mears, and his daughter Norah Geddes. In his 1904 Dunfermline report he had discussed the importance of gardens and pet’s corners in the education of children and it had also included a proposal for a zoo. The design was heavily influenced by the naturalistic scenes in Carl Hagenbeck’s zoo at Stellingen, near Hamburg, and was referred to as the Scottish Zoological Park. Ward Thompson concluded how:

... Geddes’s model for the zoo and his approach to the design of didactic landscapes, revisited, can assist in “joined-up thinking at the landscape scale, and point to ways that immersion in and understanding of local place can be consistent with a grasp of the

commonalities of experience that reflect mankind’s engagement with environment across the globe- “thinking globally, acting locally”, in the words of UN local Agenda 21 (1993).

She thus linked this to present day concerns and her own research confirming that:

Geddes recognised very well the implications of growing up in a world where access to nature and engagement with natural processes was denied, the sterile and repressive education and desolate play environments that led to antisocial behaviour. The message seems strikingly relevant a century later, as we find new evidence of our need to engage with nature and to understand the many levels at which it offers benefits to health, well-being and a sustainable future.

Additionally she noted that:

Geddes’s work is also an important precedent for those wishing to understand the “hereness” of the local and how to translate that understanding through landscape planning and design that recognises the city and its region as one, environmental whole (Ward Thompson, 2006, pp. 80–93).

Ward Thompson hereby reaffirmed the scope of the landscape profession and its social relevance.

Though born in Scotland, Geddes was much an internationalist and his ideas were relevant in different parts of the world, although they have perhaps not always been acknowledged as such. When the Tyrwhitt-trained émigré landscape architect Scotsman and University of Pennsylvania educator Ian McHarg (1920–2001) published his *Design with Nature* (1969) it set out to ‘deal with man’s relation to his environment as a whole’. The regional approach adopted and the titles of the chapters reveal the influence of Geddes who is not acknowledged, but for the choice of his disciple Mumford to write the introduction. In this Mumford declared that this text provided ‘the foundations for a civilization that will replace the polluted, bulldozed, machine-dominated, dehumanized, explosion-threatened world that is even now disintegrating and disappearing before our eyes. In presenting us with a vision of organic exuberance and human delight, which ecology and ecological design promise to open up for us, McHarg revives the hope for a better world.’ (McHarg, 1971edn.) Yet McHarg was not as generous as Mumford and never fully acknowledged his debt to Geddes, at most declaring that he found him ‘fascinating but difficult to read’ –which of course he was- (McHarg, 1996, p. 112; see also Whiston Spirn, 2000), while acknowledging his ‘brilliant mind’ (McHarg 1996, p. 93).

The Californian landscape architecture educator John Tillman Lyle (1934–1998) was much clearer in acknowledging the contributions of McHarg, and particularly Geddes, whom he uses to structure his 1994 book *Regenerative Design for Sustainable Development*. The first half referred to the ‘paleotechnic’ a term Geddes had used to explain the evolution of cities as referring to the ‘fossil-fuel-powered industrial period of the past two centuries’, while the latter period was referred to as ‘neotechnic’ as ‘founded partly on regenerative systems’. Lyle noted how Geddes had sought a solution to the environmental problems by means of planning at a regional scale (Lyle, 1994, pp. 13–14, 283). During the 1950s and ‘60s natural resources were largely overlooked as ‘fundamental considerations in shaping the environment’, but McHarg’s publication had countered this and the ‘landscape approach has gained steadily since then in stature and sophistication’ (Lyle, 1985, p. 45).

One of those who took up the helm and acknowledged Geddes was Michael Hough (1928–2013), an Edinburgh trained architect, who was also a student at McHarg’s course at the University of Pennsylvania, and became a leading landscape practitioner and educator in Ontario. His 1995 *Cities and Natural Process: A basis for sustainability* that dealt with ‘urban design issues that focus on existing cities’ commenced with a

quote from Geddes: “civics as an art has to do not with imagining an impossible no-place where all is well, but making the most and best of each and every place, especially in the city in which we live” (Hough, 1995, 2004edn, p. 2). He acknowledged Geddes, McHarg and Philip Lewis as some of the voices ‘concerned with bringing together nature and human habitat’ who have shown that

the processes which shape the land, and the limitless complexity of life forms that have been created over evolutionary time, provide the indispensable basis for shaping human settlements. The interdependence of one life process on another, the interconnected development of living and physical processes of earth, climate, water, plants and animals, the continuous transformation and recycling of living and non-living materials, these are the elements of the self-perpetuating biosphere that sustain life on earth and which give rise to the physical landscape. They are the central determinants that must shape all human activities on the land (Hough, 1995, 2004edn, p. 2).

It was from this premise that the city would have to be understood in connection with its rural hinterland, i.e. within its regional landscape that was seen as the framework for shaping the urban form (Hough, 1995, 2004edn, p. 2).

Regional approaches in the Geddesian manner were also promoted by landscape architects on the European mainland, and advanced quickly as a result of post-war reconstruction in The Netherlands, in Germany and the creation of new landscapes in Israel (see: Crowe & Miller, 1964). It was Artur Glikson, who emigrated to Israel after attaining an architectural degree in Berlin in 1935, and later promoted the theories of Geddes. He must have come across his ideas while working for the National Planning Department in Israel, though Mumford, who edited Glikson’s last book after his early death, claimed he had introduced Glikson to Geddes’s work (Glikson, 1971, p. xii). Glikson referred to Geddes as ‘the “father” of modern local and regional planning’ (Glikson, 1955, p. 20 (pp. 10, 73, 78–85)). Glikson became an authority and explained Geddes’s theories and related these to various audiences including landscape architecture, e.g. summarizing proceedings for the eighth congress of the International Federation of Landscape Architects, held in Israel in 1962 (Crowe and Miller, Vol.2 1964, pp. 106–8; see also Glikson, 1971, pp. 45–51).

Of greater importance in post-war Europe, however, was Mumford in promoting the ideas as evolved from Geddes. The Dutch landscape architect Jan Bijhouwer (1898–1974) became a good friend of Mumford and promoted similar ideas (Andela, 2011). His works included a seminal survey of the Dutch landscape that explored how people related to the landscape and had created regionally distinctive types (Bijhouwer, 1971, 2nd edn. 1977). In the mid 1950s one of Bijhouwer’s students, Meto Vroom, studied with McHarg for two years before returning and ultimately chairing the landscape architecture programme of the University at Wageningen, and further developing Geddes’s ideas. In most of these instances where Geddesian thinking was acknowledged the subject matter was related to regional surveys and projects, both rural and urban.

More recently Geddes was quoted for another cause: in an attempt to legitimise a new discipline of landscape urbanism, the landscape architect Shanti Fjord Levy produced an online article entitled ‘Grounding landscape urbanism’. This claimed that ‘landscape and urbanism have been held apart by professional boundaries, which are reinforced by divergent tactics and working scales’, and she suggested that the hybrid methods had encouraged new ways of thinking. While quoting Charles Waldheim’s definition of landscape urbanism from *The Landscape Urbanism Reader* (2006) as promoting “disciplinary realignment where landscape supplants architecture’s role as the basic building block of urban design”, she rightly questioned his claims of innovation. On account of endangering herself on being dismissed as a historian ‘perhaps because the alarm these theorists express seems

antiquated in a post-industrial urban realm- a re-examination of their views reveals a legacy that values interrelationships between culture and landscape, urban and rural.’ She found these interrelationships in the theories of Geddes, Mumford and Benton MacKaye and believed that rather than hinder these would ‘bolster landscape urbanism’s potential to develop key strategies of urban sustainability, drawing on relationships embedded in the landscape to cultivate vital, rooted cities.’ (Levy, 2011).

7. Conclusions

The above has shown that Geddes’s contribution to landscape architecture was both significant and lasting. Firstly, by introducing an integrated, multidisciplinary approach he changed the way we looked at, and considered, cities. This necessitated an enriched vocabulary which discussed cities in a new way, popularising a Darwinian terminology with cities being considered as living evolving beings with heart, lungs and arteries, as well as introducing words that seemed to capture the city more accurately, inventing ‘conurbation’ and popularizing ‘megapolis’. Principally cities were seen as a cultural product created by the people living in them, with their histories and aspirations, rather than some architectural form. Secondly he introduced the profession of ‘landscape architecture’ (rather than landscape gardening as it had previously been known) for Great Britain, and he provided it with a task and challenge: landscape-making as the master art.

Since 1930 when landscape architecture was established as the name for the profession in Great Britain it has become a recognized discipline. Yet this has not gone without challenges; the discipline has faced a number of threats relating to the scope, seeing the emergence of sub-disciplines, such as urban design, landscape urbanism and garden design. At the same time town planning as a discipline in today’s context is poorly understood, especially in an international perspective, and university departments are provided with a new identity and a new name. Like schools of architecture they are broadening their remit generating new courses in urban design. While this might be seen perhaps as evidence that there is a need for a clearer understanding between the various disciplines, it also suggests that boundaries are not clearly defined, and that we should pursue integrated approaches, rather than the silos put up by the various disciplines trying to defend their territories. Landscape architecture in Great Britain has traditionally welcomed professionals from a wide range of backgrounds, now it is timely to collaborate with these various disciplines. By naming and changing and an open-minded approach Geddes not only generated new professions he also encouraged interdisciplinarity and warned against inadvertent specialisation.

Part of the strength of Geddes’s thinking is, that, though there is a canon, this provides a way of seeing, or method, rather than a prescriptive set of guidelines. Thus there remains relevance for those encountering new (environmental) problems and challenges in tackling these through regional approaches, and holistically. One aspect that is less well, or even poorly, defined in the Geddesian approach is that it does not necessarily provide a framework for beautiful design, as was observed by landscape architect and town planner Christopher Tunnard who warned that these ethically sound places do not necessarily create beautiful cities, and that in reading Geddes ‘we may expect a long lesson in civics but not in art’ (Tunnard, 1953, p. 52).

It is interesting to see that it exactly appears to be the fact that Geddes’s writings cannot claim to be discipline specific that they continue to inspire new generations. His ideas and approaches do not provide a conclusive answer to today’s problems faced by cities, but they do provide an incentive to new generations to tackle environmental problems, both outside the usual political boundaries and outside the box.

References

- Abercrombie, P. (1945). *Greater London Plan 1944*. London: HMSO.
- Andela, G. (2011). *J.T.P. Bijhouwer: Grensverleggend landschapsarchitect*. Rotterdam: Uitgeverij 010.
- Anon (1930). 'The landscape architect: A new professional society'. *The Manchester Guardian* 12 February 1930, p. 4.
- Bews, J. W. (1936). 'Human Ecology' [review]. *The Geographical Journal*, 87(6), 560–561.
- Bijhouwer, J. T. P. (1971). *Het Nederlandse Landschap* (2nd ed.). Amsterdam: Kosmos.
- Boardman, P. (1944). *Patrick Geddes: Maker of the Future*. Durham: University of North Carolina.
- Boardman, P. (1978). *The Worlds of Patrick Geddes: Biologist, town planner, re-educator, peace-warrior*. London: Routledge p. 230; the letterhead is illustrated here on a letter dating from 1907.
- Carter, H. (1915). 'The garden of Geddes', *The Forum* October 1915, pp. 455–471; November 1915, pp. 588–595.
- Colvin, B. (1934). 'Quarterly notes'. *Landscape and Garden*, 1(3), 45.
- Colvin, B. (1947). *Land and Landscape*. London: John Murray.
- Colvin, B., & Tyrwhitt, J. (1947). *Trees for Town and Country: A selection of sixty trees suitable for general cultivation in England*. London: Lund Humphries.
- Crowe, S., & Miller, Z. (1964). *Shaping Tomorrow's Landscape: Vol. 2: The landscape architect's role in the changing landscape*. Amsterdam: Djambatan.
- Edwards, A. M. (1981). *The Design of Suburbia: A critical study in environmental history*. Pembrokeshire, London.
- Forshaw, J. H., & Abercrombie, P. (1943). *County of London Plan*. London: Macmillan.
- Geddes, P. (1904). *City Development: A report to the Carnegie Dunfermline Trust*. Edinburgh, Westminster, Bournville: Geddes.
- Geddes, P. (1911). 'The civic survey of Edinburgh' in RIBA, *Town Planning Conference, London, 10–15 October 1910: Transactions*. London: RIBA, pp. 537–574 (574).
- Geddes, P. (1968). *Cities in Evolution: An introduction to the town planning movement and to the study of civics 1915*. London: Ernest Benn.
- Geddes, P. (1949). *Cities in Evolution*, J. Tyrwhitt (Ed.). London: Williams and Norgate.
- Geddes, P. (1973). *City Development: A report to the Carnegie Dunfermline Trust* (Shannon: Irish University Press, reprint of 1904 edition), introduction by Peter Green.
- Glikson, A. (1955). *Regional Planning and Development: Six lectures delivered at the Institute of Social Studies at The Hague, 1953*. Leiden: Sijthoff.
- Glikson, A. (1971). *The Ecological Basis of Planning*. The Hague: Martinus Nijhoff.
- Hackett, B. (1950). *Man, Society and Environment*. London: Percival Marshall.
- Harvey, S. (1987). *Reflections on Landscape*. Aldershot: Gower.
- Hough, M. (1995). *Cities and Natural Process: A basis for sustainability*. London: Routledge. 2004ed.
- Jellicoe, G., & Jellicoe, S. (1975). *The Landscape of Man*. London: Thames and Hudson.
- Korn, A. (1953). *History builds the Town*. London: Lund Humphries.
- Lanchester, H. V. (1908). Park systems for great cities. *The Builder*, 95, 343–348.
- Levy, S. F. (2011). Grounding landscape urbanism. *Scenario Journal* < <https://scenariojournal.com/article/grounding-landscape-urbanism/> > .
- Loudon, J. C. (1840). *The Landscape Gardening and Landscape Architecture of the Late Humphry Repton, Esq.* London: Longman.
- Lyle, J. T. (1985). *Design for human ecosystems: Landscape, land use and natural resources*. New York: Van Nostrand Reinhold.
- Lyle, J. T. (1994). *Regenerative design for sustainable development*. New York: John Wiley.
- Mawson, T. H. (1901). *The Art and Craft of Garden Making* (2nd ed.). London: Batsford.
- Mawson, T. H. (1927). *The Life and Work of an English Landscape Architect*. London: Richards Press.
- McHarg, I. L. (1971). *Design with Nature*. New York: Doubleday.
- McHarg, I. L. (1996). *A Quest for Life: An autobiography*. New York: John Wiley.
- Meller, H. (1990). *Patrick Geddes: Social evolutionist and city planner*. London: Routledge.
- Mercer, F. A. (1939). *Gardens and Gardening*. London: The Studio. pp. 7, 14–15.
- Oxford English Dictionary* online, 'landscape architecture'.
- Repton, H. (1794). *Sketches and hints on landscape gardening*. London: Bulmer.
- Repton, H. (1803). *Observations on the Theory and Practice of Landscape Gardening*. London: Taylor.
- Shenstone, W. (1764). Unconnected thoughts on gardening. In *The Works in Verse and Prose of William Shenstone*, Vol. ii. London: Dodsley.
- Shoshkes, E. (2013). *Jaqueline Tyrwhitt: A transnational life in urban design and planning*. Farnham and Burlington: Ashgate.
- Shoshkes, E. (2017). Jacqueline Tyrwhitt translates Patrick Geddes for post World War Two planning. *Landscape and Urban Planning*, 166, 15–24.
- The National Trust. The Times*, 26 November 1896, p. 8.
- The National Trust. The Times*, 10 July 1897, p. 15.
- Tunnard, C. (1938). *Gardens in the Modern Landscape*. London: Architectural Press.
- Tunnard, C. (1953). *The City of Man*. London: Architectural Press and New York: Charles Scribner.
- Turner, T. (1987). *Landscape Planning*. London: Hutchinson.
- Turner, T. (1995). *City as landscape: A post-modern view of design and planning*. London, etc.: Spon.
- Tyrwhitt, J. (1947). *Patrick Geddes in India*. London: Lund Humphries.
- Tyrwhitt, J. (1967). 'Patrick Geddes: The Valley Section' in Dennis Sharp (Ed.). *Planning and Architecture: Essays presented to Arthur Korn by the Architectural Association* (pp. 49–57). New York: George Wittenborn.
- Ward Thompson, C. (2006). Patrick Geddes and the Edinburgh zoological garden: Expressing universal processes through local place. *Landscape Journal*, 25(1), 80–93.
- Welter, V. M. (2002). *Biopolis: Patrick Geddes and the City of Life*. Cambridge Mass, London: MIT. p. 18 which is quoted from Amelia Defries, *The Interpreter Geddes: The man and his gospel*. London: Routledge. (1927).
- Welter, V. M. (2017). Commentary on "Thinking organic, acting civic: The paradox of planning for cities in evolution" by Michael Batty and Stephen Marshall, and "Jaqueline Tyrwhitt translates Patrick Geddes for post World War Two planning" by Ellen Shoshkes. *Landscape and Urban Planning*, 166, 25–26.
- Whiston Spirn, A. (2000). 'Ian McHarg, landscape architecture and environmentalism: Ideas and methods in context'. In M. Conan (Ed.). *Environmentalism in Landscape Architecture* (pp. 97–114). Washington, D.C.: Dumbarton Oaks.
- Woudstra, J. (2015). Park policy and design of public parks in London, 1900–1945. *Die Gartenkunst*, 27(1), 119–138.
- Wright, M. (1982). *Lord Leverhulme's Unknown Venture: The Lever Chair and the Beginnings of Town and Regional Planning 1908–48*. London: Hutchison Benham.

Jan Woudstra is Reader in Landscape History and Theory at the Department of Landscape of the University of Sheffield.